NANOV Display Inc.

Digital Display Company

15” Waterproof LCD Digital TV (European Model)

Model: NGLT150WPD

Bathroom, On the Boat, Outdoor Plant, Steam Room, SPA, Rainproof Application

Inputs: PC (VGA), Composite Video Input, S-VHS & European Digital DVB-T TV Tuner

Waterproof IP67 LCD TV

April, 2008

www.nanovdisplay.com

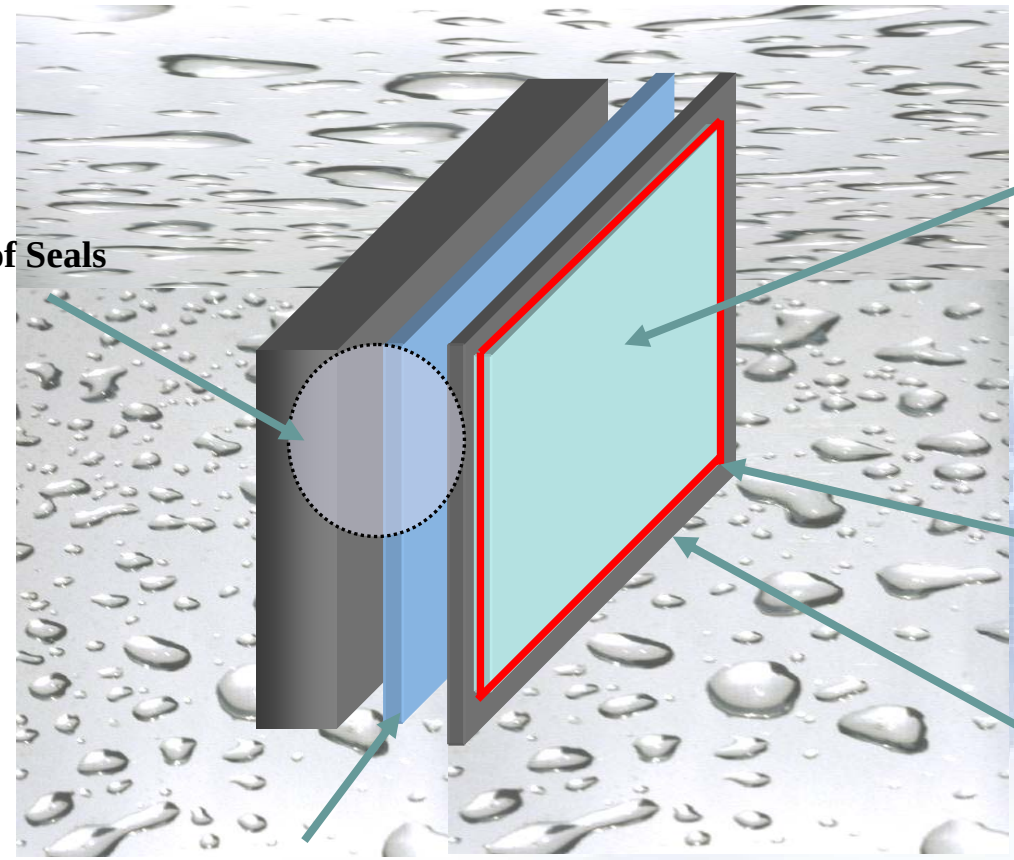
NANOV Display Inc.

The world's *First Underwater IP67 Water Proof Digital LCD TV* for the Marine, Bathroom and SPA Industry

Features

1. **IP Grade: IP67 (Tested to work 3 ft underwater for 30 minutes)**
2. **Brightness: High Brightness 550 cd/m^2**
3. **12VDC with 120VAC Adapter**
4. **Tested and works inside a Steam Room**
5. **Back Cover: Aluminum to transfer heat and protect humidity**
6. **Specially treated waterproof glass to protect against scratches**
7. **Front Touch Buttons**
8. **Floating *water resistant* IT Remote Control**

Front Cover - Waterproof & High Brightness Panel



Specially re-enforced Glass

Waterproof Seals

Prevents water from getting into the gap between the Panel and Front cabinet

Front Cabinet

High Brightness Outdoor (550cd/m²)

Features (NGLT150WPD)

Waterproof LCD for Ship and SPA builders

S.No.	Feature	Final Product
1	Panel & Brightness	15” LCD Panel, 550 cd/m²
2	IP Grade	IP67, Protection against dust and water (Immersion)
3	Front Glass	re-enforced glass with touch screen function
4	Audio Out	1W x 1W Audio Out
5	Button Switch	Touch Screen
6	PC Board & Connector	PC Board : Non-Conformal Coating , Connectors : Heavy Duty, O-Ring Waterproof connectors Two Meter Connectors Included *** All connectors should be tightened for waterproof.
7	In/Out Jacks	Extension Wire type.
8	Cabinet & Vent	Front : Specially treated glass Back : Aluminum - to transfer heat from the inside and protect against salt corrosion.
9	TV Tuner, Picture Ratio	ATSC Digital TV-Tuner, 4:3
10	Remote Control	IR LED Module, Water Floating Design, Universal remote control can be programmed
11	Picture Color	Natural Color Advanced Technology Adapted + 3D Comb Filter
12	Language	English, Spanish, French
13	Unit Weight/Dimension	13lbs, 14.7” x 13” x 2.26”

* Disclaimer: Our device is intended for use in the moist, humid and wet environmental condition. It is recommended to put the unit in an area which has shade to protect from direct sunlight. Do not use or place the unit under extensive or direct sunlight as it would cause the liquid in the panel to overheat.

Waterproof IP Grade in accordance with IEC 529

1st Identity Number	Production Category (Contact & Foreign Object Production)	2nd Identity Number	Protection Category (Water Protection)
0	No special protection	0	No special protection
1	Protection against the entry of solid foreign object, having a diameter larger than 50 mm.	1	Protection against vertically falling drip water. No harmful effects are allowed. drip water).
2	Protection against the entry of solid foreign object, having a diameter larger than 12 mm. Protection for fingers and similar objects.	2	Protection against vertically falling drip water. When the enclosure is tipped up to an angle of 15 degree from it's normal position.
3	Protection against the entry of solid foreign object, having a diameter larger than 2.5 mm. Protection for tools, wires, or similar objects which are thicker than 2.5 mm.	3	Protection against drip water that falls at an angle of up to 60 degree vertically.
4	Protection against the entry of solid foreign object, having a diameter larger than 1.0 mm. Protection for tools, wires, or similar objects which are thicker than 1.0 mm.	4	Protection against water which sprays against the equipment from all directions. No harmful effects are allowed(spray water).
5	Protection against harmful dust deposits. Complete contact protection.	5	Protection against water from a hose which is directed on the enclosure from all directions. No harmful effects are allowed(hose directed w.).
6	Protection against the entry of dust (dust proof). Complete contact protection.	6	Protection against strong seas or strong water jets.
		7	Protection against water.**(Immersion)**
		8	Protection against water.**(Submersion)**

Specifications

	Contents		Specifications
Panel	Panel		15 “, LC150X02
	Display area		408 x 306mm
	Display Color		16,777,216 color combinations
	Pixel Pitch		0.297(H)mm x 0.297(V)mm
	Resolution		1024 x 768
	Contrast Ratio		400 : 1
	Brightness		**550 cd/m2**
	Response Time	Rise Time	5 ms
		Decay Time	11 ms
	Viewing Angle		130° Horizontal / 100° Vertical
	Physical Rotation		+ 20 degree, - 5 degree up/down
	Panel Interface		LVDS
Feature	Dimming (Back light control by Remote control		Yes (Mode1. Mode2…..)
	On/Off Timer		Yes
	No Signal Mute / Auto Power off		Yes
	On Screen Display		Yes
	Multi-language OSD		English, Spanish, French
	Auto Search Memory		Yes
	Selectable Picture / Sound		Yes

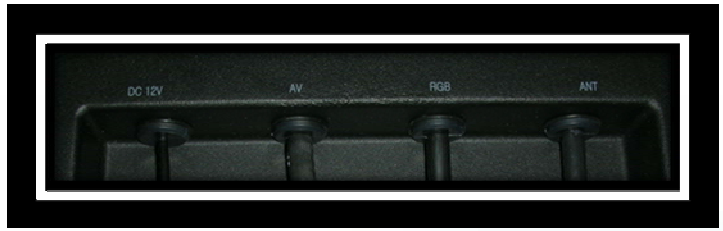
Specifications *(continued)*

	Contents		Specifications
System	Tuning System	Tuner	DVB-T TV Tuner
		Receiving Channel	54MHz ~ 803MHz
		Intermediate Frequency: (Digital Center)	44 Mhz
		Analog (P-carrier)	45.75 Mhz
		System	PLL System
	Antenna Input	NTSC	Yes
		DVB-T TV Tuner	Yes
	Video Input	Composite	Yes, RCA
		S-Video(Y/C)	Yes
		PC Analog	Yes
	Caption And V-Chip		Yes
	Sound System	MTS	Yes
		Standard Model	Standard, Music, Movie, Speech, User
	Audio Output		1W x 1W
Jacks	Composite Input	Video Input	Yes (RCA jack)
		S-Video Input	Yes (Din Jack)
		Audio Input	Yes (RCA Jack)
	Audio Line Out		450mV + / - 50mV

Specifications (*continued..*)

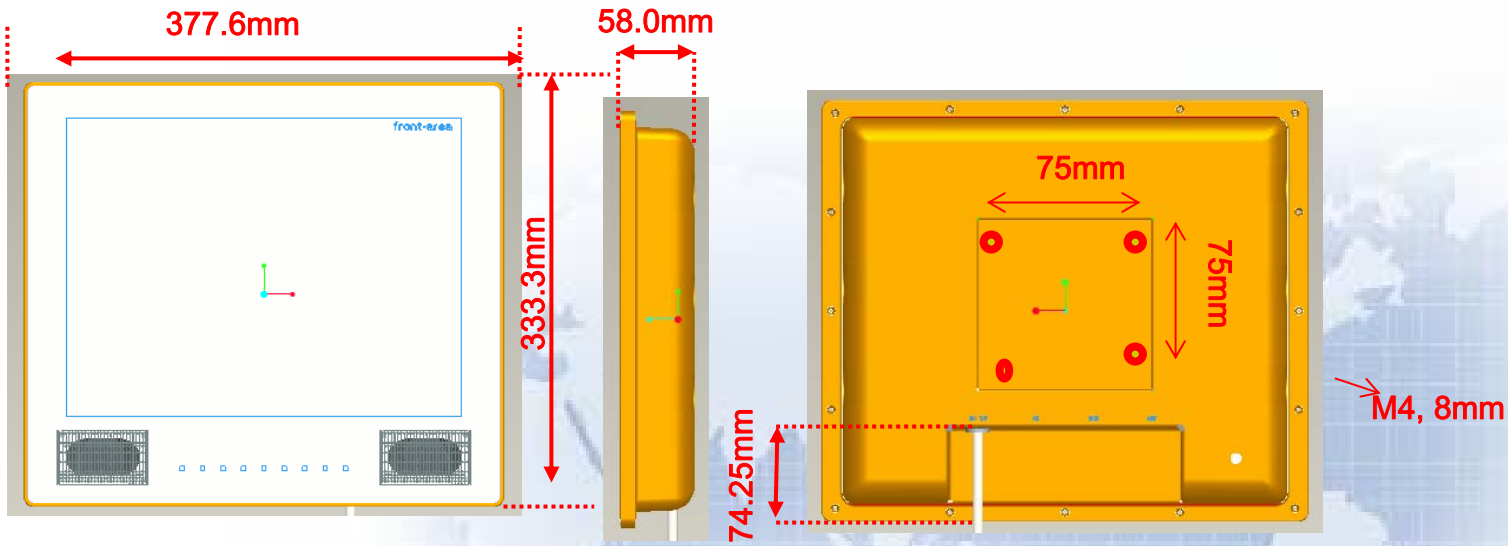
	Contents		Specifications
Others	Power Supply		DC 12V, 3A
	Power Consumption (Watts)		Stand-by : 1.8W / Power On : 45W
	Audio Power		1W x 1W
	Coating Level		IP – 67
	Accessories	User's Manual, Adapter, Power Cable, Remote Control, Warranty Card	
	Regulation	Safety	NRTL, TUV, CE
		EMI	FCC
	Dimensions		14.7" x 13" x 2.26"
	Weight	Gross	13 lbs

Waterproof Connectors (Reference)



NGLT150WPD Watertight Back Connectors.

MECHANICAL DRAWING (NGLT150WPD)

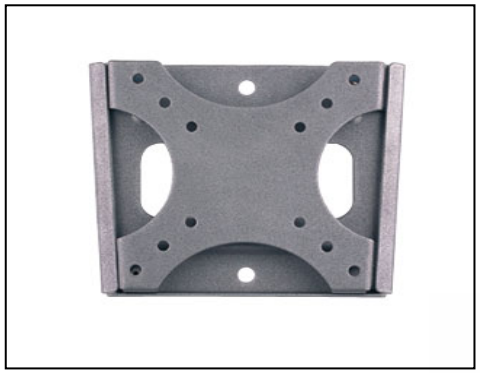


Width (inside)	Height (Inside)	Depth (inside)	Width (Inputs)
377.6mm	333.3mm	58.0mm	74.25mm

Yacht & SPA Video Application with Waterproof Speakers, Amplifier and DVD Player

Optional Accessories

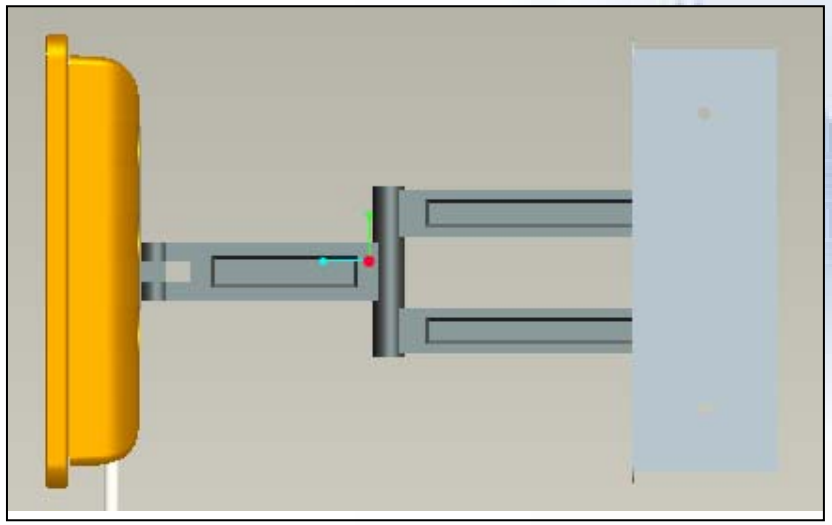
Wall Mount Brackets



Model: NML123
Water Resistant Flush Wall Mount

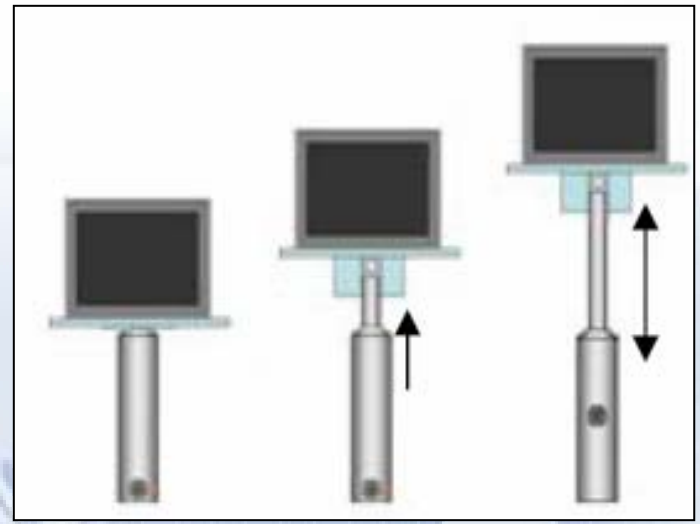
Model: NML12B
Water Resistant Adjustable Wall Mount

15”, Enclosure with Arm Mount



Model: NGLT150ENC

OEM Electric Lift



Model: NKLT100LFT
Marine Grade VESA 100mm Electric Lift

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